

FIG. 1

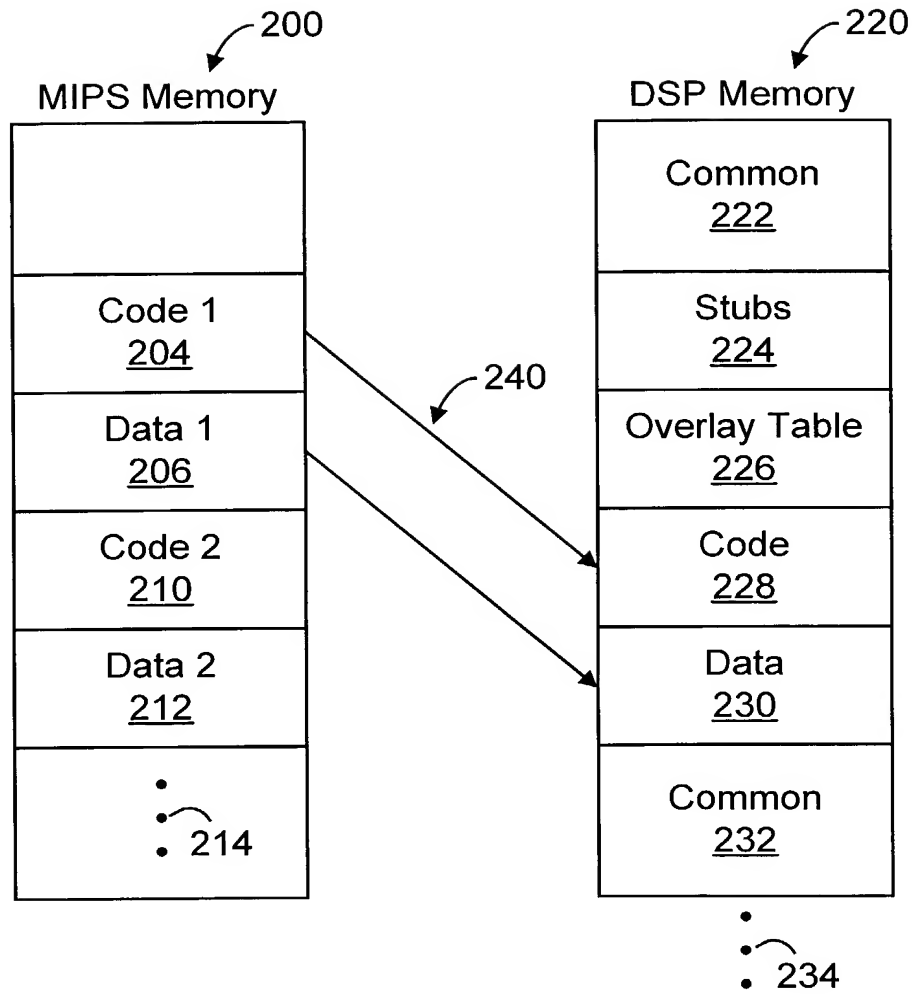
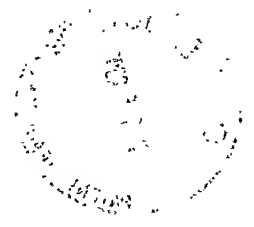


FIG. 2

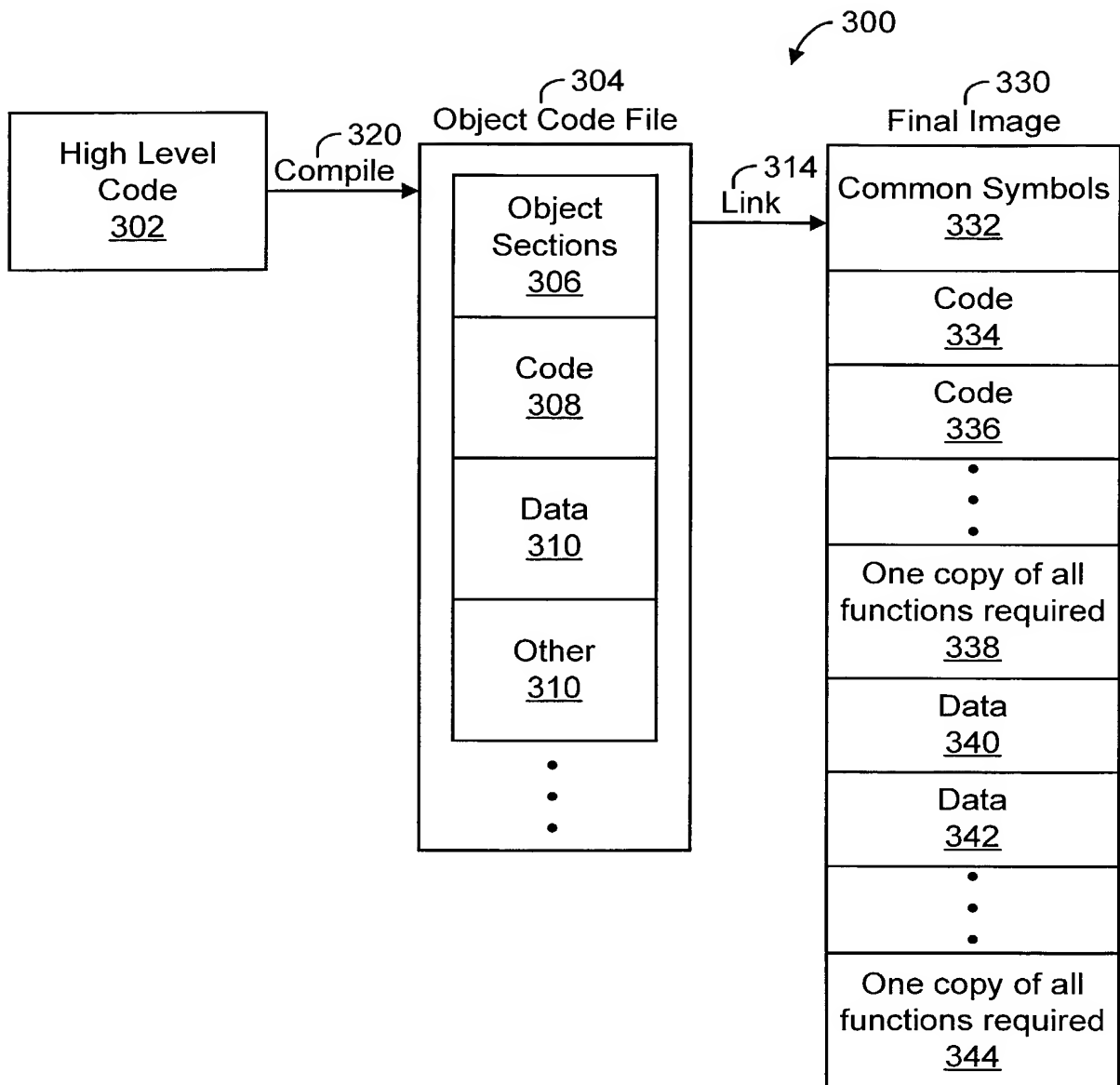


FIG. 3A

Traditional Linker

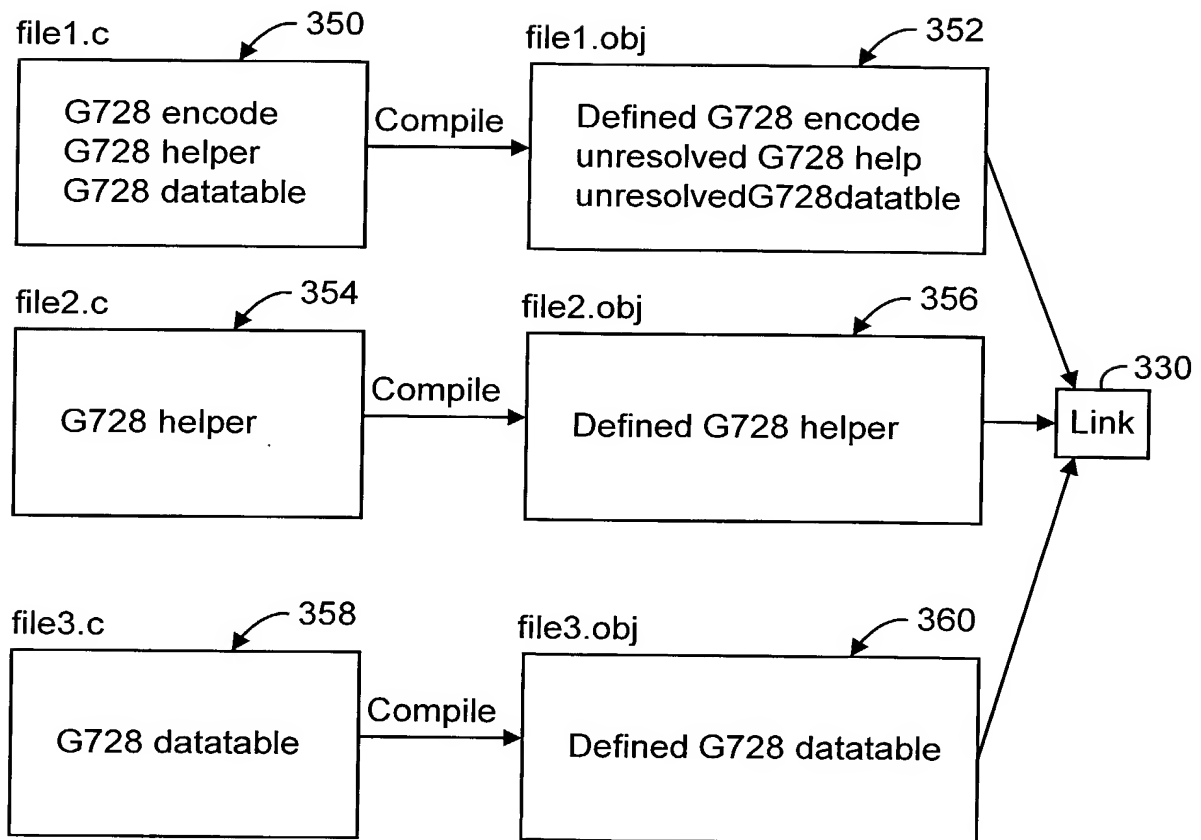


FIG. 3B

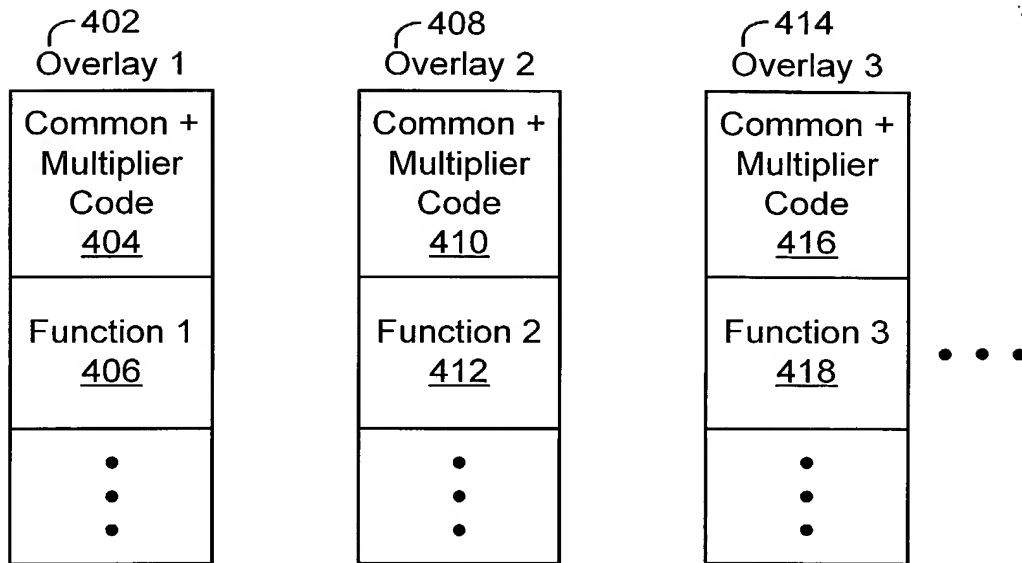


FIG. 4A

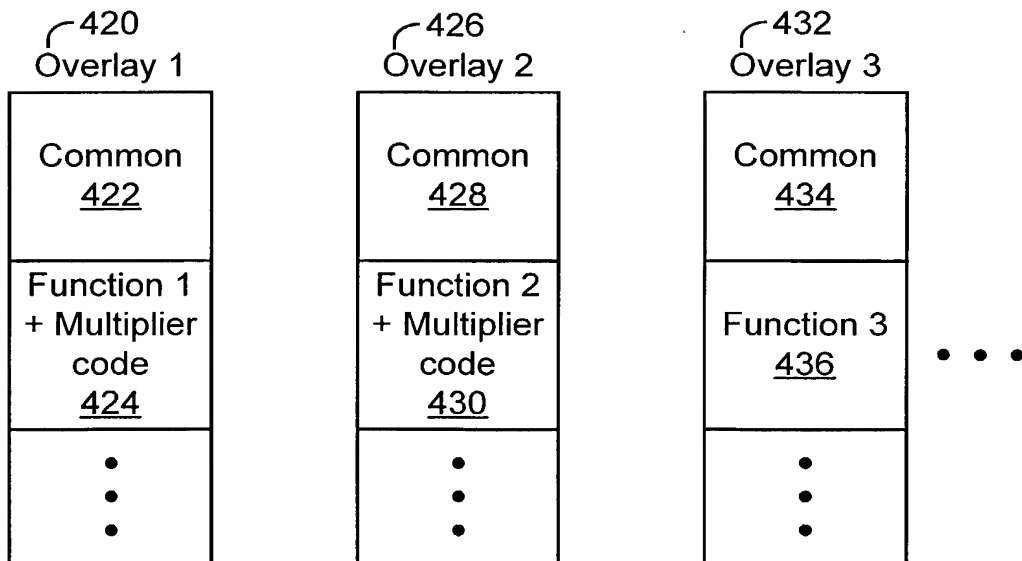


FIG. 4B

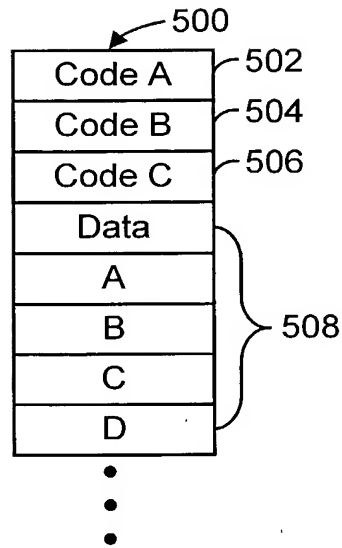


FIG. 5A

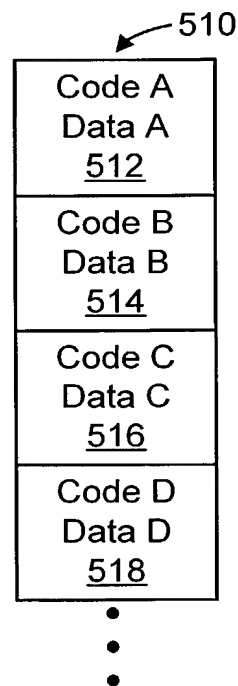


FIG. 5B

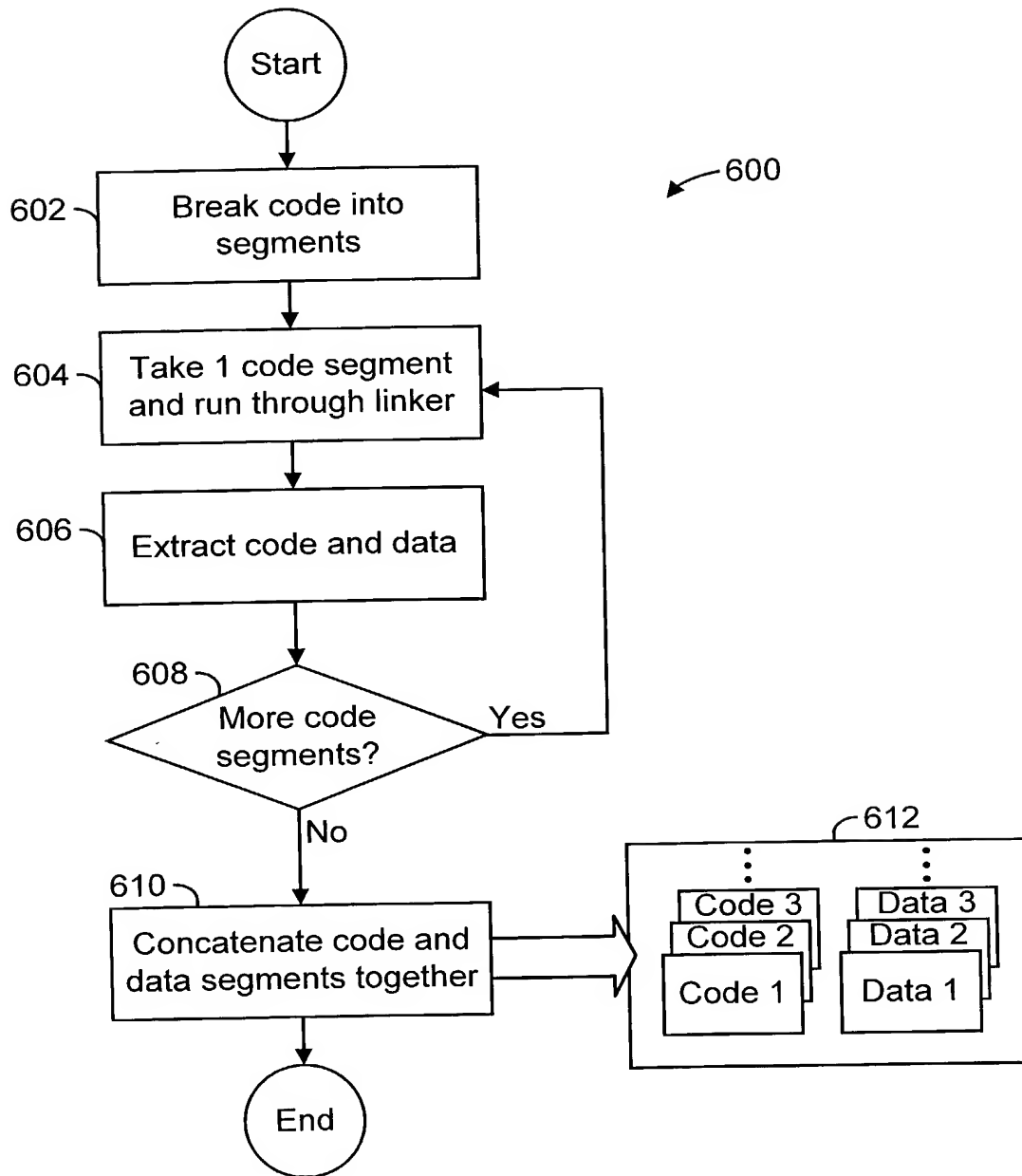


FIG. 6A

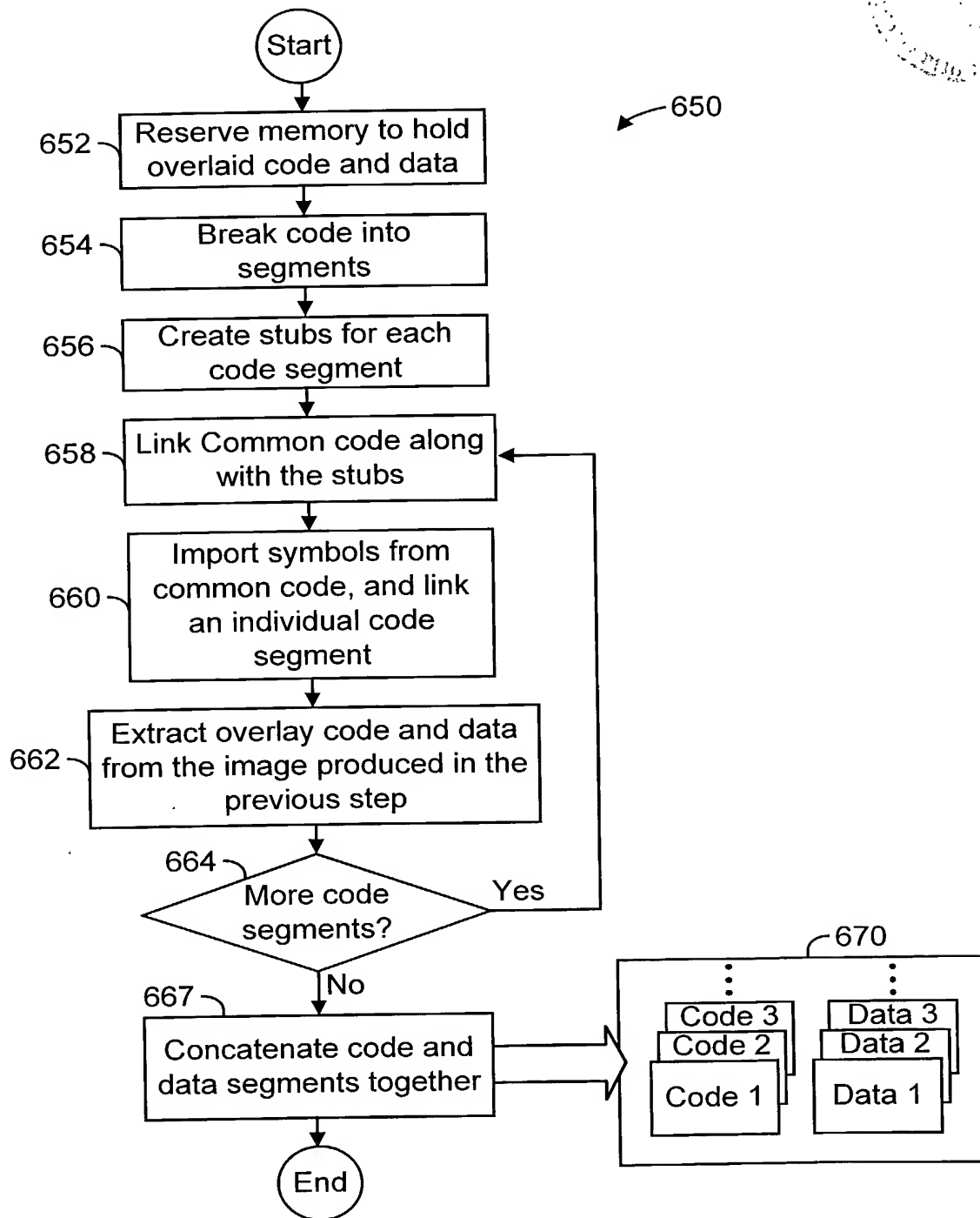


FIG. 6B

Detailed Implementation

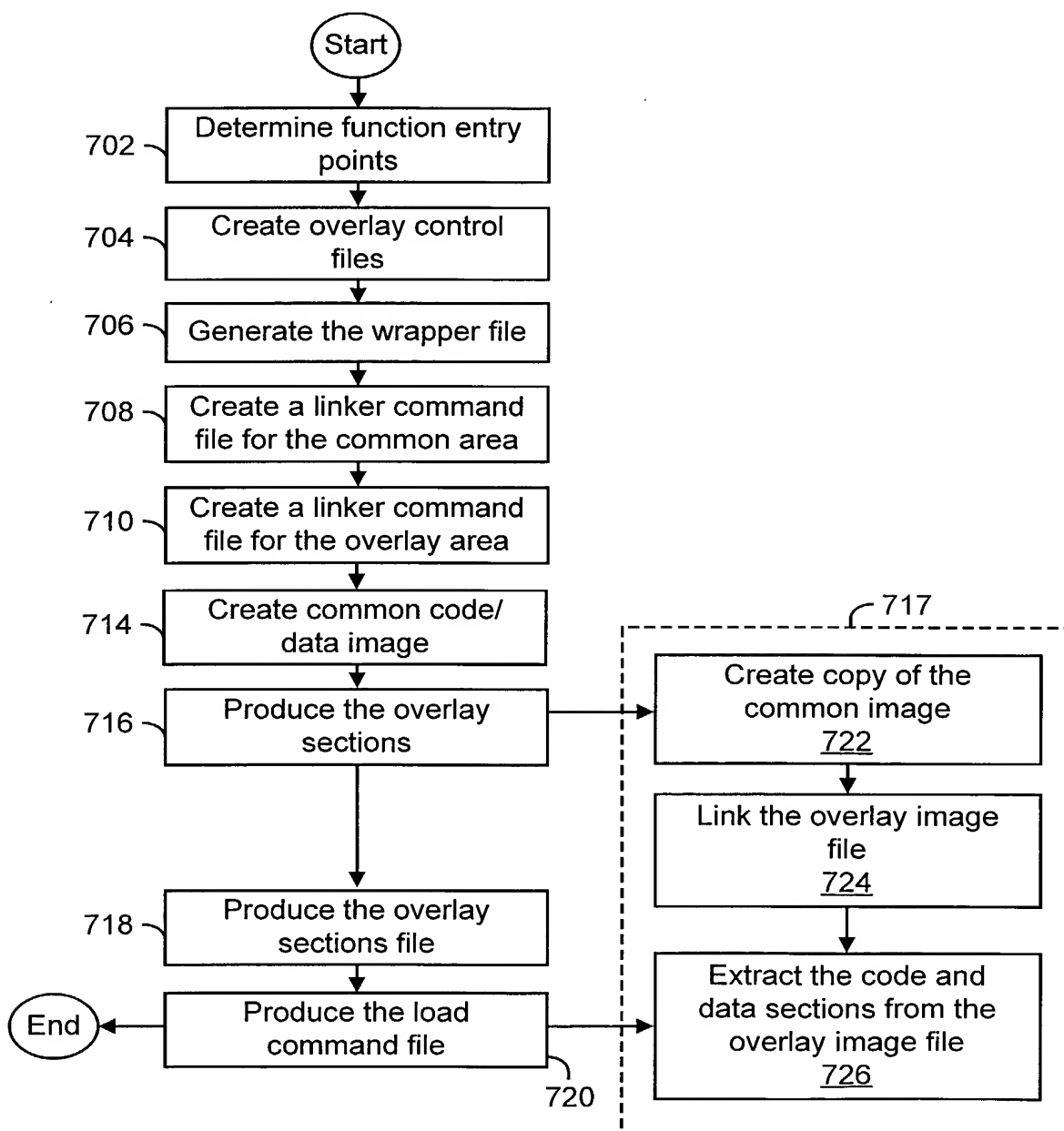
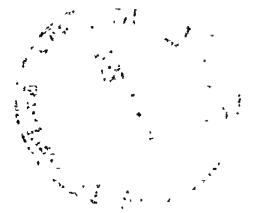


FIG. 7



Linker Command File: Common Area

```
MEMORY
(
    ... other memory sections removed ...
    PAGEDCODE(X) : ORIGIN = 0X4200, LENGTH = 0X1800
    PAGEDDATA : ORIGIN = 0X6000, LENGTH = 0X1400
)
SECTIONS
(
    ... other sections removed ...
    pagedCodeSection :
    (
        . = ALIGN (4) :
        _dem_gCodeOverlayAreaStart = ABSOLUTE ( . ) :
        . # . + 0x1800 :
        _dem_gCodeOverlayAreaEnd = ABSOLUTE ( . ) :
    ) > PAGEDCODE
    pagedDataSect :
    (
        . = ALIGN (4) :
        _dem_gDataOverlayAreaStart = ABSOLUTE ( . ) :
        . # . + 0x1400 :
        _dem_gDataOverlayAreaEnd = ABSOLUTE ( . ) :
    ) > PAGEDDATA
    .overlayDescr :
    (
        _dem_gOverlayDescr = ABSOLUTE ( . ) :
        SHORT ( -2 )
    ) > INTDATA
)
)
```

FIG. 8A

Overlay Area

```
MEMORY
(
    ... other memory sections removed ...
    PAGEDCODE(X) : ORIGIN = 0X4200, LENGTH = 0X1800
    PAGEDDATA : ORIGIN = 0X6000, LENGTH = 0X1400
)
SECTIONS
(
    ... other sections removed ...
    .text :
    (
        . = Align (4) :
        * ( . text)
    ) > PAGEDCODE
    .data :
    (
        . = Align (4) :
    ) > PAGEDDATA
)
)
```

FIG. 8B